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ABSTRACT

Forty-four computer programs specifically designed to help students learn English as a second language (ESL) are listed. The programs chosen focus on a linguistic activity, are appropriate for any proficiency level, are considered appropriate for students of high school and adult age (excluding college-level foreign students), and have been produced or updated since 1983. Programs for native speakers felt to be easily adapted to second language learners are also included, but word processing programs and programs requiring random-access tape and/or a videodisk player are excluded. Tables give information about the software producer, price, needed hardware, copyright, focus, activity type (drills, tutorials, games, and problem-solving), grade level, proficiency level, ESL-readiness, modifiability, and management options. A final section highlights 10 titles with outstanding characteristics and one product line recommended for preview. (MSE)

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THE Northwest Regional Educational Laboratory

TECHNOLOGY PROGRAM

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ESL SOFTWARE FOR USE WITH HIGH SCHOOL AND ADULT STUDENTS

A MicroSIFT Quarterly Report

May 1987

by
Bruce Carrick

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Northwest Regional Educational Laboratory

ACKNOWLEDGMENT

Additional staff members instrumental in developing this report are:

Anne Batey, Computer Education Specialist, Technology Program, Northwest Regional Educational Laboratory

Karen Reed Green, Research Associate, Literacy and Language Program, Northwest Regional Educational Laboratory, with special expertise in English as a Second Language

WHAT THIS REPORT IS ABOUT

This is a survey of software for helping students learn English as a second language (ESL). ESL students have instructional needs which are distinct from the needs of native speakers who may only require help with literacy and written English but who already speak the language fluently. In addition, students who speak and write a "nonstandard" dialect of English may find this software of some use as well.

The ESL curriculum is large. Fluency in a second language includes acquiring all the language skills normally learned before entry into formal schooling plus all the language arts skills normally included in the curriculum. Further, since fluency involves a tremendous amount of cultural knowledge, older students have even more to learn. Consequently, instructional materials for ESL must cover a lot of ground. To make this report manageable and useful, we have limited the ESL software considered for review. In identifying software, we looked for programs that:

- specifically identify ESL students as one of the target audiences;
- focus on a linguistic activity. This eliminated many games, curriculum-based activity software (like math software) and simulations which many enterprising teachers have turned into language learning experiences;
- are appropriate for any proficiency level: prereaders to advanced ESL;
- are considered appropriate for students of high school and adult age (but not for college-level foreign students); and
- were produced or updated after 1983. Some popular titles that have been around for awhile were therefore not included.

We also included programs that we felt would easily shift from use with native speakers to use with second language learners. The key term is "easily," which called for a value judgment as to how much modifying was reasonable, or how much time the teacher could spend in helping a student use the program. We excluded:

- word processors and related writing tools. There is a large number of these on the market and resourceful ESL teachers are finding many ways to use them. (See the February 1987 MicroSIFT Report, Word Processors and Writing Tools for the Elementary Grades;)
- programs that require a random-access tape recorder and/or video disk player.

Having identified, collected and reviewed 44 software packages, we wrote product descriptions with brief comments from the reviewers. This information is presented in a companion report called Product Descriptions: ESL Software for Use with High School and Adult Students.

This summary report provides information on all 44 titles in two tables: Table 1 includes product information such as price, copyright and focus, and Table 2 includes ESL content information. Of the 44 titles listed, we conclude this report with highlights of ten titles and one product line which we recommend for preview.

CATEGORIES WE USED TO DESCRIBE ESL SOFTWARE

Area and Focus

We divide the programs into three areas: grammar, reading and writing, and vocabulary. Focus further divides area by actual content.

Type

This refers to the format of the lesson or activity presented in the software. We use the following categories: drill (**Dr**), tutorial (**Tu**), game (**Ga**), problem solving (**PrS**) and utility (**Ut**). Though authoring systems could be considered teacher utilities, they were classified by how the student experienced them.

- Drills assume that a concept has already been taught.
- Tutorials provide the entire instructional cycle.
- Games require that students use their linguistic knowledge to develop a winning strategy to handle random, timed or competetive events.
- Problem solving differs from games in that problem solving seeks an overall solution whereas a game usually produces a score from a series of repeated events.

Reading Level

Some programs are originally intended for native users or at least give reference to native reading abilities. When the documentation included the targeted native reading level, we note it without discussing what measures of readability were being employed.

Proficiency Level

This category indicates the ESL proficiency level required by the user. In Table 2 it is given as a range based on the following divisions:

- Prereader (**Pre**) describes both those who are literate in their own language but not in English, and those who are not literate in either. It overlaps the Beginners category for those who may have gained a substantial degree of oral proficiency in English.
- Beginner (**Beg**) describes those who are in their first year of language instruction.
- Low-Intermediate (**Low**) describes those who have had a couple of years of English instruction while immersed in an English-speaking environment.
- Intermediate (**Int**) can be typified by students who, with a full year of intensive English, would be ready to enter high school courses.
- Advanced (**Adv**) students might be able to enter the mainstream classroom with a half year of intensive English.

ESL Ready

Programs that are ready for ESL classrooms are given a **"Y"** in this column. This includes some programs that can be modified or expanded as well. Those programs that are nearly ready, requiring only slight modification or teacher adaptation, were marked **"Y?"**. (Note: The majority of the 44 titles are not specifically designed as ESL software.)

Modifiable

Programs that are modifiable (**Y**) come with "editors" which allow teachers to make changes in the program. We did not consider a program modifiable unless the content of the lesson could be changed. It was not enough only to be able to reset some of the program variables.

Implementation

Programs included in the report are labeled with up to three terms: as is, modify, or build.

- As is confirms that the program is ready for ESL use as it comes out of the package. However, housekeeping chores may be necessary before a program can be used. This could include setting up a class role or creating student disks from the supplied materials.
- Modify refers to those programs in which major or minor content revisions are required before the lesson can be used by ESL students.
- Build is reserved for those modifiable programs which expect the teacher to add to the existing database, creating new lessons and data disks.

Management

This category indicates those programs which provide the instructor with a summary of student results (Y). The minimum requirement was that the results could be printed, whether by the student before quitting the program or by the teacher at a later date.

TABLE 1

Title	Producer	Price	Hardware	Copy-right	Focus	Type
Grammar						
English as a Second Language	COMPress	995.00	IB	1986	Comprehensive	Tu, Dr
ESL Picture Grammar	Gessler	59.95	AP	1985	Verbs	Dr
Grammar Gremlins	Davidson	49.95	AP, IB	1986	Survey	Dr
Nouns/Pronouns	Hartley	39.95	AP, IB	1986	Nouns	Dr
Sentence Combining I	Milliken	105.00	AP	1984	Phrases	Tu, Dr
Sentence Combining II	Milliken	105.00	AP	1984	Clauses	Tu, Dr
Sentence Maker +	ALA/Regents	89.95	AP	1985	Verbs	Ga
Verb Usage 1, 2, 3, 4	Hartley	89.95	AP, IB	1986	Irreg Verbs	Dr
Verbs	Hartley	39.95	AP, IB	1986	Verbs	Dr
Reading/Writing						
Adele's Animated Alphabet	ESP	14.95	AP	1985	Letters	Ga
Capitalization	Hartley	49.95	AP	1985	Orthography	Dr
Cause and Effect	Hartley	39.95	AP, IB	1985	Logic	Dr
Fact or Opinion	Hartley	39.95	AP, IB	1984	Perspective	Dr
Figurative Language	Hartley	39.95	AP, IB	1984	Fig Lang	Dr
Hide 'N Sequence	Sunburst	69.00	AP, CO	1985	Cohesion	PrS
Language Experience Recorder	Teacher Support	79.95	AP	1985	Expression	Ut
M-ss-ng L-nks	Sunburst	69.00	AP, AT, CO, IB, TR	1984	Cloze	PrS
Multiple Meanings	Hartley	39.95	AP	1986	Context	Dr
Quartext	Longman	87.50	AP, CO	1984	Cloze	Ga
Reading and Writing Connection	Hartley	49.95	AP	1986	Linking Words	Dr
Reading Mastery Series	ALA/Regents	659.85	AP	1986	Comprehension	Dr
Reading Strategy Series	Prentice-Hall	250.00	AP, IB	1986	Cloze	PrS
Who, What, Where, When, Why	Hartley	35.95	AP, IB	1986	Space/Time	Dr
Vocabulary						
Antonyms/Synonyms	Hartley	39.95	AP, IB	1986	Ant/Synonyms	Dr
Basic Vocabulary Builder	Ballard & Tighe	49.95	AP	1984	Basic N/V/Adj	Dr
Compound Words & Contractions	Hartley	49.95	AP	1985	Word Formation	Dr
Elephant Ears with Speech	Ballard & Tighe	49.00	AP	1983	Spatial Preps	Tu, Dr
Essential Idioms in English	ALA/Regents	119.95	AP	1985	Idioms	Dr
Homonyms	Hartley	39.95	AP, IB	1986	Homonyms	Dr
Idea Cat I, II	Ballard & Tighe	284.00	AP	1985	Aural	Dr
Mouse Math	Ballard & Tighe	30.00	AP	1984	Numbers	Dr
Opposites	Hartley	29.95	AP, IB	1986	Antonyms	Dr
Rain Maker	COMPress	75.00	AP	1984	Association	Ga
Roots/Affixes	Hartley	39.95	AP, IB	1986	Word Formation	Dr
SocLink	AGS	44.95	AP	1985	Association	Ga
SocMatch	AGS	44.95	AP	1985	Relationships	Ga
SocMate	AGS	44.95	AP	1985	Analogies	Ga
SocOrder	AGS	44.95	AP	1985	Sequence	Ga
SocPix	AGS	44.95	AP	1985	Classification	Ga
SocSort	AGS	44.95	AP	1985	Classification	Ga
Speakeasy 1--Supermarket	rda/Mind Builders	99.95	AP	1986	Conversation	Dr
Spell It!	Davidson	49.95	AP, AT, CO, IB	1984	Spelling	Dr
Vocabulary Mastery II	ALA	599.85	AP	1987	Most Frequent	Dr
Word Attack!	Davidson	49.95	AP, AT, IB, MAC	1985	Expansion	Dr, Ga

Key: AP - Apple, AT - Atari, CO - Commodore, IB - IBM, MAC - Macintosh

DR - Drill, GA - Game, TU - Tutorial, PRS - Problem Solving, UT - Utility

TABLE 2

Title	Grade Level	Proficiency Level	ESL-ready	Modify	Implement	Mngmnt
Grammar						
English as a Second Language		Low-Adv	Y	N	as is	N
ESL Picture Grammar		Low-Int	Y	N	as is	Y
Grammar Gremlins		Low-Adv	N	Y	modify	Y
Nouns/Pronouns		Beg	Y?	Y	modify	Y
Sentence Combining I		Low-Int	Y	Y	as is/modify	Y
Sentence Combining II		Int-Adv	Y	Y	as is/modify	Y
Sentence Maker +		Beg-Adv	Y	Y	as is/build	N
Verb Usage 1, 2, 3, 4	3-5	Low-Int	Y?	Y	modify	Y
Verbs	4-6	Beg-Int	Y?	Y	modify	Y
Reading/Writing						
Adele's Animated Alphabet		Pre	Y	N	as is	N
Capitalization	3-6	Low	Y?	Y	modify	Y
Cause and Effect	3-6	Low-Int	Y?	Y	modify	Y
Fact or Opinion	3-6	Low-Int	N	Y	modify	Y
Figurative Language	7-9	Adv	N	Y	modify	Y
Hide 'N Sequence	3-12	Low-Adv	Y	Y	modify	N
Language Experience Recorder		Pre-Adv	Y	Y	build	Y
M-ss-ng L-nks		Low-Adv	Y	Y	as is/build	N
Multiple Meanings	4-6	Low-Int	N	Y	modify	Y
Quartext		Low-Adv	Y	Y	as is/build	N
Reading and Writing Connection	6-8	Int	Y	Y	modify	Y
Reading Mastery Series	3-8	Low-Int	Y	N	as is	Y
Reading Strategy Series		Low-Adv	Y	Y	as is/build	N
Who, What, Where, When, Why	1-4	Beg	Y?	Y	modify	Y
Vocabulary						
Antonyms/Synonyms	4-6	Low-Int	Y?	Y	modify	Y
Basic Vocabulary Builder		Beg	Y?	N	as is	N
Compound Words & Contractions	1-3	Beg-Low	Y?	Y	modify	Y
Elephant Ears with Speech		Pre	Y	N	as is	Y
Essential Idioms in English		Low-Adv	Y	N	as is	Y
Homonyms	1-4	Beg-Low	Y?	Y	modify	Y
Idea Cat I, II		Beg-Low	Y	N	as is	Y
Mouse Math		Pre	Y	N	as is	N
Opposites	2-10	Beg-Adv	Y?	Y	modify	Y
Rain Maker		Beg-Adv	N	Y	build	N
Roots/Affixes	3-5	Beg-Low	Y?	Y	modify	Y
SocLink	1-5+	Pre-Beg	Y	N	as is	Y
SocMatch	1-7+	Beg-Int	Y	N	as is	Y
SocMate	1-7+	Low-Adv	Y	N	as is	Y
SocOrder	K-6+	Beg-Low	Y	N	as is	Y
SocPix		Pre	Y	N	as is	Y
SocSort	1-7+	Low	Y	N	as is	Y
Speakeasy 1--Supermarket		Pre-Beg	Y	N	as is	N
Spell It!		Low-Adv	Y	Y	modify	N
Vocabulary Mastery II		Beg-Low	Y		as is	Y
Word Attack!	4-12	Low-Adv	Y?	Y	modify	N

Key: Pre - Prereader, Beg - Beginner, Low - Low-Intermediate, Int - Intermediate, Adv - Advanced

Y - Yes, Y? - Yes, with modification, N - No

OUR PREVIEW RECOMMENDATIONS (In alphabetical order by topic.)

In this final section we highlight 11 titles we think deserve a closer look. They stand out because most of the following characteristics were apparent in each product:

- The language content is accurate.
- It is appropriate for the abbreviated cultural awareness of ESL students.
- The learning tasks are particularly relevant to learning a second language, as opposed to formalizing students' knowledge of a first language.
- Nonlinguistic tasks are kept to a minimum, including: keyboarding skills; the interpretation of graphic and aural cues; inferring the focus of a task; and mastery of grammatical terminology.
- Current linguistic and pedagogical theory are apparent in the strategy and objectives of the program. Ideally, the objectives and supporting theory should be explained to the teacher in the manual and made apparent to the student in the program.
- The program is relatively free from distracting or negative factors such as: programming bugs, hard-to-remember or inconsistent commands, awkward program management tasks, irrelevant learning tasks, age-inappropriate features, unsympathetic responses to errors or errant key strokes and insensitivity to the linguistic ability of second language learners.
- Grammar and vocabulary in the directions and the support screens are not radically beyond the level of the items being taught in a typical second language learning syllabus.
- The program models desirable English usage, avoiding telegraphic English such as excised articles and truncated sentences.
- Teachers or students can modify and create their own material.

GRAMMAR

ESL Picture Grammar

For those looking for low-level drills for verb and subject use in the simple tenses, this is one of the best. The program has wrestled with a key ESL problem: how to direct an exercise and place it in context when the user cannot be directed by complex and detailed English prompts. It is designed to give practice in the simple tense patterns of English verbs by replacing written instructions and prompts with visual clues. The simple and progressive forms of present, past and future verbs are drilled in statement, negation and question form.

A few irritating but nonlethal quirks appear in the program. This may be a picture grammar, but it does rely on linguistic terminology to get students to perform. The use of the articles and the nonuse of possessive pronouns or quantifiers is somewhat unnatural even though the program itself analyzes the student's use of articles. The program does a good job of ignoring inadvertent typing errors. However, it is not flexible enough to accept alternate answers.

Sentence Maker+

The exercises that come with this authoring program or those that are produced by the teacher will give students the chance to discover English sentence patterns. Words appear on the screen in grammatical columns, each column representing a grammatical unit in a sentence. Students select one word from each column to create sentences that are grammatical and meaningful. Grammatically correct

but meaningless sentences are called to the student's attention. In questioning the meaning of a sentence, the program does not, however, identify where the error is. This program offers safe, open exploration, encouraging self-directed learning. It is an interesting program, both for those who like to move at their own pace or for those who like competition.

Teachers of intermediate and advanced students will enjoy being able to use it immediately, without having to create exercises, word lists or the like. However, teachers of beginning students will need to modify or design new exercises. It is possible to purchase an optional packet of five Student Diskettes, allowing several students to work at once.

READING/WRITING

Hide 'n Sequence

The focal point of this program is a problem-solving exercise which is an electronic variation of arranging a cut-up story. After the first line is given, students progressively reassemble the story by selecting the next sentence from a choice of three. Students must, of course, recognize the elements that bind coherent writing, however, since the program contains no explicit teaching or analytical routines, it requires a teacher to make the task and the skills explicit.

The program provides passages in four styles of discourse (narration, exposition, description, and persuasion). Story selections come from this database of literary selections or from selections created using the built-in word processor. The copyable student disks allow teachers to build a large library of literary selections, short and long.

Because use of the included literary selections assumes knowledge of writing styles particular to English, teacher- or student-generated selections may be more appropriate for the lower-level ESL classrooms. This is one of the few programs that actually has students produce language. Students enter their own writing samples just as the teacher does. Students can test and fine tune their cohesive devices in various narrative styles. While the program does not analyze the students' passages, peer response could be used as the guage of clarity.

Language Experience Recorder

This is an interesting utility program based on the Language Experience Approach. Typically, the teacher types in a student's dictated story using a simple-to-use word processor. The story is analyzed for word count, unique word count, sentence count, and average length of words and sentences. A readability analysis (grade level) is produced from one of several indices. Since a database for each student can be built, a cumulative word list is also produced. The database can be used to provide a word recognition test, which can be taken on paper or on the computer. The stories can be used for practice reading since they are composed of the student's own oral vocabulary and structure.

The program is easy to use but is based on considerable amounts of one-on-one student and teacher interaction. Given that this level of interaction is fundamental to the Language Experience Approach, this program becomes a time saver, enabling the teacher to increase the depth of individual attention given to students.

Reading and Writing Connection Level I

The aim of this program is to aid in the understanding and use of 25 phrasal and 25 clausal linking words. It is to the credit of the program that students must produce language rather than simply recognize correctly linked phrases. The trade-off is that this program is less modifiable than other products by the same publisher. Less is required of instructors to set it up, but more teacher monitoring will be necessary during its use. This is a good reinforcement activity for intermediate and advanced students. (A Level II version is promised but not yet available.)

Sentence Combining I and II

Teachers will find this a useful review program although it does not teach sentence combining concepts without some teacher involvement. Designed for native speakers, it presents basic sentence combining skills for producing written English by modeling sentence combining techniques in a visual display. Students should find the program rewarding; it is simple to operate, yet it deals with significant language features. Typing skills are not a factor in the first two disks of each set (I and II). Students use the arrows, space bar and number keys to rearrange the sentence parts, receiving feedback concerning the accuracy of their sentences.

The Challenge disks, the third in each set, sacrifice this feedback feature so that teachers can enter their own material allowing a freer form of response via a mini-word processor. Students are asked to combine a given set of sentences and compare theirs with one example of an acceptable model. With these disks, teachers can raise the age interest level of the material and tailor the material to their own syllabus and approach. One viable alternative to spending over $200 for both sets is to purchase the two Challenge disks for $40. While the Challenge disks do not include tutorials and closely-monitored drills, students would still be given the opportunity to practice manipulating relevant sentence patterns.

VOCABULARY

Essential Idioms in English

This package offers practice with over 470 primarily verbal idioms. The material is divided into 39 lessons, each offering four modes of experience with idioms: presentation, recognition, production and competitive recognition. All idioms are presented in a sentence for context, and all work with them is done in sentence contexts. The meaning of each idiom is not defined but is presented in a paraphrased "equivalent" statement. In some cases it would be helpful to have more explanatory material and sample sentences for each idiom upon request.

This is one of those rare programs which allow the student to work profitably with little demand on the teacher. The programmers have considered the needs of ESL students in packaging the lessons: simplicity, self-explanatory graphics and relatively little telegraphic English. However, lower level students may require some help reading the directions the first time. Minimal keyboarding skills are required and they can be picked up while using the program.

SocMate

This program offers a meaningful vocabulary strengthening experience to low-intermediate and even advanced students in a game format. Students select from a list of four words the one word that best fits the missing word in the equation "A is to B as C is to D." Working with items like synonyms, antonyms, functions, homonyms, categories and linear progressions, students practice reasoning skills that lead to eight kinds of analogous relationships. The program is usable by ESL students, even though it was designed for native speakers.

This program is perhaps the best of the MicroSoc series in terms of the ESL classroom. The others in the series may warrant consideration by ESL teachers, though the series as a whole scored low in documentation, cultural sensitivity, second language learning issues and demands on the teacher during use. Yet programs like these are likely to elicit much student involvement. The pressure of competition will help wean students away from translating items back into their own language in order to manipulate the ideas and then retranslating the results back into English.

Speakeasy Vol. 1: The Supermarket

Incorporating the use of an audiotape, this package presents the student with a multisensory experience. The program uses an approach to language acquisition based on the Fundamental Skills

Method, recognizing the hierarchy of learning by seeing, hearing and repeating. Students are provided with an introduction to a very American experience, the supermarket, along with some appropriate vocabulary and expressions. Students observe two shoppers buying groceries, listen to their conversation, and hear the conversation again in intonationally accurate segments which are then reassembled in the backwards buildup method. At each step the program pauses to allow students to repeat, then it resumes the lesson when the student is ready.

The manual contains cultural and language background information and suggestions for followup. This program comes ready for use and requires little teacher support while in operation. However, it does presume that the teacher incorporates the material in preparatory and follow-up sessions. The testing program, which is contained on the disk, tests the student's ability to match pictures with written words or sentences. On the negative side, there is no student feedback in the testing mode and the graphic images are not always close to real world images.

(This title will ultimately include 9 others, with 3 available by September 1987.)

Vocabulary Mastery II A, B, C

The vocabulary drilled in this program is taken from the 3,000 most common words in English, treated in groups of ten. The computer presents students with a randomly selected sentence and asks them to type in the word that fits the blank. As students work, a file of problem words is generated, which can be reviewed separately. A game is also provided in which the students race the computer in filling in the blank.

This is a solid, ready-to-use drill program. It is not sufficient to introduce vocabulary nor is it intended for absolute beginners. The program operation is attractive and user friendly. Students should be reminded that the computer only looks to see if the word is the same as the one on the list currently being studied.

The Hartley Product Line

The Hartley Software line consists of a large number of titles which have potential ESL value, most of which need some modification. The strength of the Hartley line is that each program has an easy-to-use editor. The editor enables the modification of material to fit the teacher's terminology and approach, and to accommodate the needs and reading level of the users. Teachers may modify tutorial sections, quiz content, helps and responses, and the management system. In fact, the editor is so complete that an ambitious teacher could replace the entire contents of each program's database for a completely customized set of lessons. Hartley's lab pack policy makes it possible to economically create several versions of each exercise. While there are other generic authoring systems available (not reviewed here), some teachers may find it easier to modify an existing Hartley program than to create one from scratch.

PRODUCER INFORMATION

ALA Publications & Software
11426 Rockville Pike
Rockville, Maryland 20852
800/346-3469

American Guidance Service Software (AGS)
2041 Publisher's Building
Circle Pines, Minnesota 55014
800/328-2560

Ballard & Tighe
480 Atlas Street
Brea, California 92621
800/321-4332

COMPress, Inc.
PO Box 102
Wentworth, New Hampshire 03282
800/221-0419

Davidson and Associates
6069 Groveoak Place, #12
Ranchos Palos Verdes, California 90247
800/556-6141

Educational Software Products (ESP)
12 Bella Vista
Iowa City, Iowa 52240
319/354-3095

Gessler Educational Software
900 Broadway
New York, New York 10003
212/673-3113

Hartley Courseware, Inc.
133 Bridge Street
Dimondale, Michigan 48821
800/247-1380

Longman
95 Church Street
White Plains, New York 10601
914/993-5000

Milliken Publishing Company
PO Box 21579
St. Louis, Missouri 63132
314/991-4220

Prentice-Hall, Inc.
Englewood Cliffs, New Jersey 07632
Sylvan Avenue
201/592-2540

Regents Educational Software
Two Park Avenue
New York, New York 10016
800/822-8202

Research Design Associates/Mind Builders
PO Box 848
Stony Brook, New York 11790
800/654-8715

Sunburst Communications
39 Washington Avenue
Pleasantville, New York 10570
800/431-1934

Teacher Support Software, Inc.
PO Box 7125
Gainesville, Florida 32605
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